

### Cardiovascular

- 1 Post-partum prolongation of the atrial repolarization in rabbit *P. Pachter, Z. Ungvári, P. P. Nánási, I. Mucha, V. Kecskeméti and G. Y. Losonczy*
- 7 Electrophysiological changes in rat ventricular and atrial myocardium at different stages of experimental diabetes *P. Pachter, Z. Ungvári, P. P. Nánási and V. Kecskeméti*
- 15 Sustained vessel dilation induced by increased pulsatile perfusion of porcine carotid arteries *in vitro* *F. A. Recchia, B. J. Byrne and D. A. Kass*

### General physiology

- 23 Isotonic and hypertonic sodium loading in supine humans *L. J. Andersen, T. U. S. Jensen, M. H. Bestle and P. Bie*
- 31 Thermogenic response to adrenaline during restricted blood flow in the forearm *L. Simonsen, B. Steff, N. J. Christensen and J. Bülow*

### Cell biology

- 39 Modulation of  $\text{Na}^+ \times \text{H}^+$  exchange by hydrostatic pressure in isolated bovine articular chondrocytes

*J. A. Browning, R. E. Walker, A. C. Hall and R. J. Wilkins*

- 47 Effects of age, sex and physical exercise on the phagocytic process of murine peritoneal macrophages *M. D. Ferrandez and M. De la Fuente*
- 55 The effects on net fluid transport of noxious stimulation of the jejunal mucosa in anaesthetized rats *A. Timar Peregrin, M. Svensson, H. Ahlman, M. Jodal and O. Lundgren*
- 65 The mechanotransduction of the crayfish stretch receptor neurone can be differentially activated or inactivated by local anaesthetics *J. H. Lin and B. Rydqvist*

### Rapid communications

- 75 The tachykinins neurokinin A and substance P, but not neurokinin B, stimulate contraction of isolated muscle cells from rat small intestine *M. Lördal and P. M. Hellström*
- 77 Brain cooling in diving seals *Å. Odden, L. P. Folkow, M. Caputa, R. Høivæd and A. S. Blix*

### Review Article

- 79 Synaptic and extrasynaptic roles of glutamate in the mammalian hippocampus *D. M. Kullmann*

### Skeletal muscle

- 85 Oestrogen attenuates post-exercise myeloperoxidase activity in skeletal muscle of male rats *P. M. Tiidus and E. Bombardier*
- 91 Impact of testosterone and oestradiol on region specificity of skeletal muscle-ATP, creatine phosphokinase and myokinase in male and female Wistar rats *A. Ramamani, M. M. Aruldas and P. Govindarajulu*
- 99 Creatine uptake in isolated soleus muscle: kinetics and dependence on sodium, but not on insulin *C. A. Willott, M. E. Young, B. Leighton, G. J. Kemp, E. A. Boehm, G. K. Radda and K. Clarke*
- 105 Effects of anabolic/androgenic steroids on regenerating skeletal muscles in the rat *A. Ferry, P. Noirez, C. Le Page, I. Ben Salah, D. Daegelen and M. Rieu*
- 111 Exogenous reactive oxygen and nitric oxide alter intracellular oxidant status of skeletal muscle fibres *C. L. Murrant, F. H. Andrade and M. B. Reid*

- 123 Near-infrared monitoring of tissue oxygenation during application of lower body pressure at rest and during dynamic exercise in humans *T. Nishiyasu, N. Tan, N. Kondo, M. Nishiyasu and H. Ikegami*

### Cardiovascular

- 131 Involvement of the human splanchnic circulation in pressor response induced by handgrip contraction *B. A. Waaler, T. Toska and M. Eriksen*
- 137 Decrease in sodium-calcium exchange and calcium currents in diabetic rat ventricular myocytes *S. Chattou, J. Diacono and D. Fenway*
- 145 Haemodynamic changes in the cardiovascular system during the early phases of orthostasis *H. W. Huisman, P. J. Pretorius, J. M. Van Rooyen, N. T. Malan, F. C. Eloff, P. J. Laubscher and H. S. Steyn*
- 151 Hypoxia and hyperoxia both transiently affect distribution of pulmonary perfusion but not ventilation in awake sheep *M. N. Melsom, T. Flatebø and G. Nicolaysen*

### Miscellaneous

- 159 Activation of renal pelvic chemoreceptors in rats: role of calcitonin gene-related peptide receptors *J. A. R. Gontijo and U. C. Kopp*

### Cardiovascular

- 167 Mechanisms for activation of aortic baroreceptor C-fibres rabbits and rats *P. Thoren, P. A. Munch and A. M. Brown*
- 175 Calcium response to adenosine and ATP in rabbit afferent arterioles *A. M. Gutiérrez, M. Kornfeld and A. E. G. Persson*
- 183 Nitric oxide and prostaglandin pathways interact in the regulation of hypercapnic cerebral vasodilatation *G. Heinert, P. C. G. Nye and D. J. Paterson*
- 195 Effects of  $[Na^+]_o$ ,  $[Ca^{2+}]_o$  and cyclopiazonic acid on decline of post-extrasystolic potentiation and twitch kinetics in guinea-pig and human myocardial preparations *H. J. Åsgrímsson, B. Wohlfart, J. Brandt and M. Jóhannsson*

### Ageing

- 203 Aging alters aortic antioxidant enzyme activities in Fischer-344 rats *S. R. Demaree, J. M. Lawler, J. Linehan and M. Delp*

### Muscle

- 209 Changes in voltage-activation of contraction in frog skeletal muscle fibres as a result of sarcoplasmic reticulum  $Ca^{2+}$ -ATPase activity *W. Mème and C. Léoty*

- 217 Stimulation frequency-dependent reductions in skeletal muscle force and speed in creatine kinase deficient mice *A. de Haan, M. Bien and P. W. L. Verdijk*

### Polypeptides

- 223 Effects of oxytocin on the IGF-axis and some gastrointestinal hormones, in ad libitum fed and food-restricted female rats *A. Soblström, K. Brismar, C. Carlsson-Skewirut, P. Bang and K. Uvnäs-Moberg*

### Urinary tract

- 231 Physiological and morphological effects of perfusing isolated rat kidneys with hyperosmolar mannitol solutions *K. E. Lindström, L. Rönnestedt, G. Jaremko and B. Haraldsson*

### Exercise

- 239 Oxygen cost of dynamic leg exercise on a cycle ergometer: effects of gravity acceleration *M. Girardis, D. Linnarsson, C. Moia, D. R. Pendergast and G. Ferretti*

### Rapid communication

- 247 Effects of recombinant erythropoietin (r-HuEPO) on plasma glucose concentration in endurance-trained rats *J.-L. Cayla, C. Lavoie, R. Gareau and A. Duvallet*

### Review articles

- 251 Catecholaminergic neurotransmission: flagship of all neurobiology *L. Sjöärne*
- 261 The impact of biochemical methods for single muscle fibre analysis *D. Pette, H. Peuker and R. S. Staron*

### Cardiovascular

- 279 Cholinergic induced mesenteric vasorelaxation in response to head-up tilt *M. J. Perko, P. Madsen, G. Perko, T.V. Schroeder and N. H. Secher*
- 285 Decreased responsiveness of vascular postjunctional  $\alpha_1$ ,  $\alpha_2$ -adrenoceptors and neuropeptide Y1 receptors in rats with heart failure *Q. Feng, X. Sun, X. Lu, L. Edvinsson and T. Hedner*
- 293 Differentiation of the peptidergic vasoregulatory response to standardized splanchnic hypoperfusion by acute hypovolaemia or sepsis in anaesthetized pigs *A. Aneman, J. Bengtsson, J. Snygg, M. Holm, A. Pettersson and L. Fändriks*

### Exercise

- 301 Increased metabolism of infused 1-methylxanthine by working muscle *J. M. Youd, J. M. B. Newman, M. G. Clark, G. J. Appleby, S. Rattigan, A. C. Y. Tong and M. A. Vincent*

- 309 Hyperoxia does not increase peak muscle oxygen uptake in small muscle group exercise *P. K. Pedersen, B. Kiens and B. Saltin*
- 319 Neuromuscular fatigue during repeated exhaustive submaximal static contractions of knee extensor muscles in endurance-trained, power-trained and untrained men *M. Pääsuke, J. Ereline and H. Gapeyeva*
- 327 Total blood volume in endurance-trained postmenopausal females: relation to exercise mode and maximal aerobic capacity *P. Parker Jones, K. P. Davy, C. A. DeSouza and H. Tanaka*

### Cell biology

- 335 Tachykinins stimulate acid and pepsinogen secretion in the isolated porcine stomach *P. T. Schmidt, T. N. Rasmussen and J. J. Holst*
- 341 The use of caged adenine nucleotides and caged phosphate in intact skeletal muscle fibres of the mouse *D. G. Allen, J. Lännergren and H. Westerblad*

### Miscellaneous

- 349 Author index
- 353 Subject index

